

Frontal Sinus Involvement in Sarcoidosis: A Rare Malignancy Mimic

Mishal Ihsan ¹ | Haissan Iftikhar ¹ | Salih Bakhiet ²
Northampton General Hospital, United Kingdom

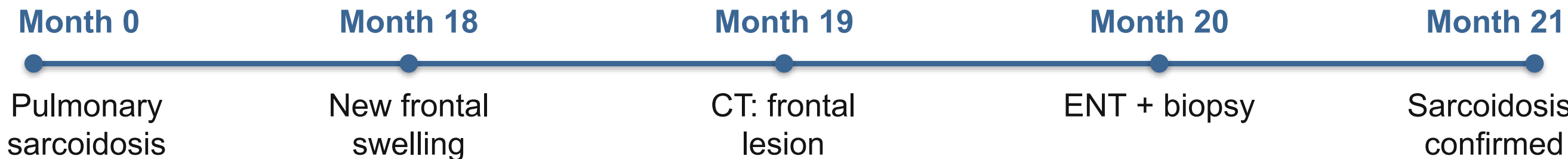
Abstract

Sinonasal sarcoidosis is uncommon; frontal sinus and skull involvement are particularly rare. In this patient, destructive frontal-bone disease mimicked malignancy, while biopsy confirmed sarcoidosis.

Case Presentation

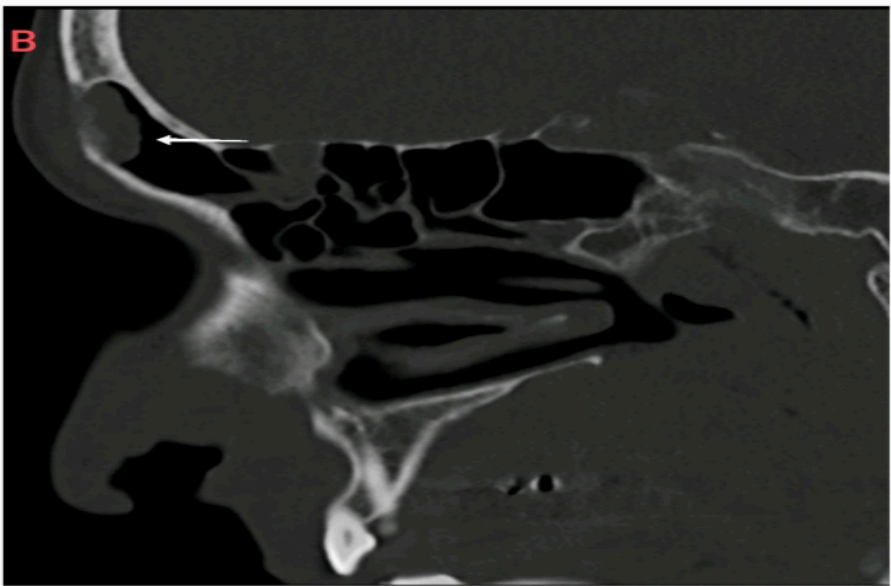
52 Year old female with pulmonary sarcoidosis
1 year history of nasal obstruction and intermittent epistaxis
New painless left frontal swelling, CT prompted urgent cancer pathway referral

Clinical Timeline



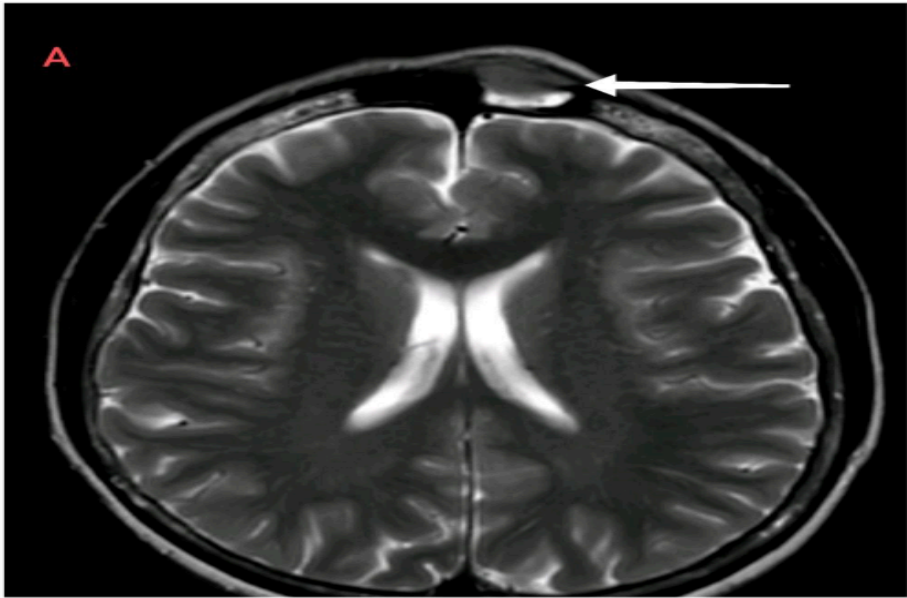
Imaging & Histopathology

CT sagittal

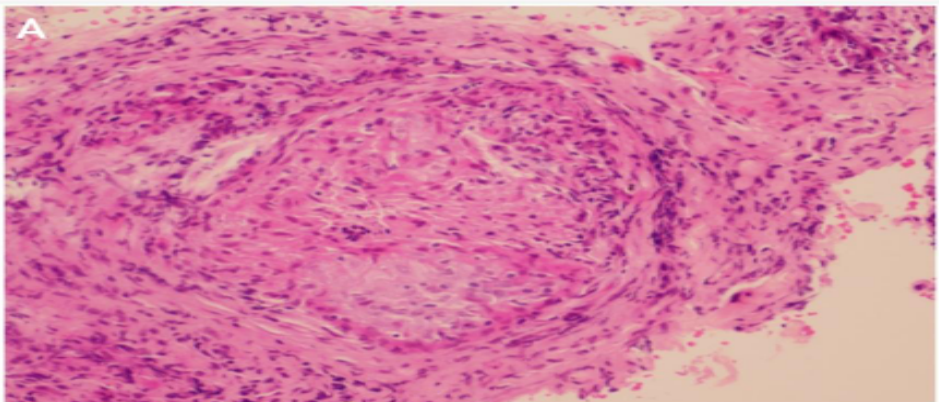


Frontal sinus wall erosion and scalp extension.

MRI axial



Soft tissue lesion Left Frontal bone, extending into frontal sinus



Histology
Non-necrotising granulomas; no malignancy.

Investigations & Diagnosis

MRI head and neck demonstrated lytic lesions, largest in the left frontal bone with associated soft tissue extending into the frontal sinus. Frontal lesion biopsy showed non necrotising granulomas. No microorganisms were identified. Findings were consistent with sarcoidosis.

Discussion

Sinonasal sarcoidosis is rare (<1% in published reports), while skull involvement is particularly uncommon. Destructive frontal-bone disease with soft-tissue extension and multi-site head and neck involvement closely mimicked malignancy.. Histopathological confirmation is essential thus clinicians should consider sarcoidosis in the differentials of atypical sinonasal lesions.

Conclusions / Learning Points

- Consider sarcoidosis in atypical destructive sinonasal or skull lesions.
- Aggressive imaging may closely mimic malignancy.
- Biopsy is essential to confirm diagnosis and exclude malignancy.
- Multidisciplinary ENT, radiology and respiratory follow-up is important.

Management & Follow-up

The patient was referred to the respiratory team for systemic sarcoidosis management with multidisciplinary follow-up planned.

Selected References

1. Kirsten AM et al. BMC Pulm Med. 2013;13.
2. McCaffrey TV, McDonald TJ. Laryngoscope. 1983;93:1281-1284.